



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,605	07/24/2003	Alberto Peisach	60783.000005	7920

21967 7590 12/19/2005

HUNTON & WILLIAMS LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
1900 K STREET, N.W.  
SUITE 1200  
WASHINGTON, DC 20006-1109

EXAMINER

BUTLER, PATRICK

ART UNIT	PAPER NUMBER
----------	--------------

1732

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/625,605	PEISACH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patrick Butler	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 15 and 17-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15 and 17-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

The Applicant's Amendments and Accompanying Remarks, filed 19 September 2005, have been entered and have been carefully considered. No claims are new, Claims 15, 18, and 28 are amended, Claim 16 is canceled, and Claims 15 and 17-31 are pending.

In view of Applicant's canceling Claim 16, the Examiner withdraws the previously set forth Double Patenting statement regarding Claims 16 and 18 as detailed in the Specification section of the Office Action dated 19 May 2005.

In view of Applicant's amendment of claims 15, 18, and 28 to clarify the claims, the Examiner withdraws the previously set forth 35 U.S.C. 112, second paragraph objection as set forth in the Claim Rejections - 35 USC § 112 section of the Office Action dated 19 May 2005.

Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

The Text of those sections of Title 35, US Code not included in this action can be found in a prior Office Action.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 1732

Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The new subject matter is the "5 to about 10 % volume adhesive". The Specification, particularly p. 15, lines 1-7 cited by Applicant within Remarks filed 19 September 2005, does not teach this particular amount of adhesive. It refers to "those skilled in the art" to teach an appropriate amount. Neither does it ~~teach~~ ~~not~~ specifically teach the amount, nor does it refer to any particular reference to rely on for this portion of the presently claimed invention. The quantity of adhesive relied upon to be claimed subject matter of the Patent was introduced via Amendment on 19 September.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Jonas et al (5,234,126).

With regard to claim 15, Jonas et al teach a method for forming a plastic container for hot-filled food product (abstract; claim 1), comprising: selecting at least one polymer for a plastic container (column 13, lines 57-68); and forming the plastic

Art Unit: 1732

container (column 14, lines 1-5); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (column 8, lines 59-68), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (column 5, lines 19-27; Fig. 3 [see outwardly deflected portion of bottom surface]); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (claim 1); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (claim 1; see column 5, lines 19-27).

With respect to the preamble and content of Claim 15 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With regard to claim 17, Jonas et al teaches forming the container may comprise extrusion, injection molding, and blow molding (column 14, lines 1-5).

With regard to claim 18, Jonas et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least one polymer for a plastic container (column 13, lines 57-68); and thermoforming a container from the heated polymer (column 14, lines 1-5); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (column 8, lines 59-68), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (column 5, lines 19-27; see Fig. 3 [see outwardly deflected portion of bottom surface]); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (claim 1); wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, and wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (claim 1; column 5, lines 19-27). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With regard to claim 20, Jonas et al teach that the bottom surface flexes inward into the container cavity (column 5, lines 19-28).

3. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by McHenry et al (4,667,454).

With regard to claim 18, McHenry et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least one polymer for a plastic container (column 4, lines 48-61); and thermoforming a container from the heated polymer (column 3, line 39); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (Figure 1A), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed (Figure 1A); wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (Figure 1B); wherein further the inward flexing of the bottom surface of the container wall reduces a pressure differential between the

Art Unit: 1732

inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (reduction of volume will inherently perform this task); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport, wherein further the flexing surface maintains its inwardly flexed configuration following cooling of the hot-filled container (Figure 1A and 1B). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

With regard to claim 19, McHenry et al teach that the thickness of the container walls decreases from a point substantially at the mouth (figure 5, T2) to a point substantially at the bottom surface (figure 5, T5).

4. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Agrawal et al (5,234,126).

With regard to claim 18, Agrawal et al teach a method for forming a plastic container with a selectively deformable surface (abstract), comprising: selecting at least



Art Unit: 1732

one polymer for a plastic container (abstract, polyester); and thermoforming a container from the heated polymer (column 6, lines 44-50); wherein the plastic container comprises: a mouth; a bottom surface; and a container wall between the mouth and the bottom surface (Figure 6), wherein prior to hot-filling of the container with a food product, the bottom surface is outwardly flexed; wherein further one of the outwardly flexed bottom surface or the container wall is configured to flex inward into the cavity of the plastic container during cooling of the plastic container following hot-filling of the container with food product (abstract; see Fig. 3, Ref. 64 [outwardly flexed]); wherein further the inward flexing of the bottom surface or the container wall reduces a pressure differential between the inside of the container and atmospheric pressure when either the container is hot-filled with food product or when the container is transported from a locale of lower atmospheric pressure to higher atmospheric pressure (reduction of volume will inherently perform this task); and wherein further the non-flexing surface maintains the same form from prior to hot-filling or transport (see col. 10, lines 65-68). Official notice is taken of the fact that it is well known to heat a plastic sheet to its VICAT temperature before thermoforming.

With respect to the preamble and content of Claim 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As

Art Unit: 1732

it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290).

With regard to claim 21, Jonas et al teach the invention of claim 20 as discussed above, but does not explicitly teach that the circumference of the mouth is greater than the circumference of the bottom surface. Hodson et al teaches a container for food storage that can be used with a hot fill application (paragraph 0057) in which the circumference of the mouth is greater than the circumference of the bottom surface (figure 3). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to create a container where the circumference of the mouth is greater than the circumference of the bottom in the process of Jonas et al. The motivation to do so would have been to facilitate easy removal of a semi-solid food product from the container.

Art Unit: 1732

With regard to claim 22, Jonas et al teach that the plastic/polypropylene (column 13, line 65) comprises a plastic suitable for solid phase pressure forming (column 14, line 5, thermoforming).

With regard to claim 23, Jonas et al teach the plastic further comprises polypropylene (column 13, line 65).

With regard to claim 24, Jonas et al teach the plastic further comprises a barrier enhancement agent (column 13, line 64, EVOH).

With regard to claim 25, Jonas et al teach the barrier enhancement agent comprises ethylene vinyl acetate-vinyl alcohol (column 13, line 64, EVOH).

With regard to claim 26, Hodson et al teach the plastic further comprises an adhesive suitable for solid phase pressure forming, polypropylene and EVOH (paragraph 0052).

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290) and Hope et al (5,202,192).

With regard to claim 27, Jonas et al in view of Hodson et al teach the invention of claim 26 as discussed above, but do not explicitly teach that the adhesive contains an antioxidant. Hope et al teaches a plastic container comprising an adhesive blend containing an antioxidant (column 2, lines 66-68). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add an antioxidant to the adhesive taught by Hodson et al. The motivation to do so would have been protect the food contained in the container from oxidation.

Art Unit: 1732

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (5,234,126) in view of Hodson et al (US 2002/0187290) as applied to Claim 22 above, and further in view of McHenry et al. II (US Patent No. 4,554,190).

With respect to Claim 28 McHenry II teaches a plastic container with the components of Hodson (polypropylene, EVOH, and adhesive) (see col. 18, lines 39-42). The components are 5% EVOH (<15%), 6% adhesive (5-10%), and 89% PP (80-90%) (see col. 18, lines 39-42), which meets the limitations of the claim.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McHenry II's plastic component portions with the structure taught by Jonas in view of Hodson because McHenry II's invention is within the same field of endeavor as Jonas in view of Hodson as it is directed to making plastic containers (abstract) and contains the same components (see col. 18, lines 39-42).

8. Claims 29-31 are rejected under 35 U.S.C. 103(a) as unpatentable over Agrawal et al (5,234,126).

With regard to claim 29, Agrawal et al teach a range of preform, neck, wall, and bottom thicknesses that anticipate the ranges described by claim 29. Agrawal et al teach that the preform may be 1250 to 5000  $\mu\text{m}$  thick (column 6, lines 15-18), the wall thickness may be 250 to 900  $\mu\text{m}$  thick, the bottom may be 250 to 1800  $\mu\text{m}$  thick and the shoulder area may be 350-1250  $\mu\text{m}$  thick (column 12, lines 52-61). For example, the equation would be satisfied if the preform were 1600  $\mu\text{m}$  thick, the shoulder was 1250  $\mu\text{m}$  thick, the wall was 600  $\mu\text{m}$  thick and the bottom were 300  $\mu\text{m}$  thick.

Art Unit: 1732

With regard to claim 30, Agrawal et al teach that the container does not have uniform wall thickness due to the differences in the amount of stretch in different areas. Stretching a preform with uniformly thick walls will result in a uniform decrease in thickness from the top to the bottom of the finished container.

With regard to claim 31, Agrawal et al teach the invention of claim 30 as discussed above, but does not explicitly disclose the thicknesses of 0.7 mm at the mouth, 0.28 mm near the bottom, and 0.16 mm at the bottom of the container. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used these thicknesses, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art and it is well known that the thickness of a container is a result effective variable where the result is the crush strength of the container. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

Applicant's arguments filed [filing date] have been fully considered but they are not persuasive.

Applicant argues with respect to the 35 USC 102 and 103 rejections. Applicant's arguments appear to be on the grounds that:

- 1) Jonas does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.

Art Unit: 1732

2) Jonas is suitable for terminal sterilization rather than hot-fill because terminal sterilization is 250 degrees F and hot-fill is at 180 degrees F, therefore it would not be able to flex.

3) The outward flexed bottom surface is not inherent in Jonas.

4) The flexing during terminal sterilization of Jonas is not consistent with the flexing of hot-fill in the instant claims 15 and 18.

5) McHenry does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.

6) McHenry does not disclose a container for hot-fill packaging because it is suitable for sterilization at 250 degrees F.

7) The outward flexed bottom surface is not inherent in McHenry.

8) Agrawal does not teach each and every limitation of Claims 15 and 18 as amended, particularly that the bottom surface is outwardly flexed.

9) Agrawal's surface changes in response to the volume decrease brought on by adding hot materials which does not cause it to flex inward when it is used in hot-filling, Therefore, it does not flex inward and stay inward during cooling.

10) The outward flexed bottom surface is not inherent in Agrawal.

11) The rejection of Claims 21-26 over Jonas in view of Hodson is not a prima facie case of obviousness because Hodson does not make up for the deficiencies of Jonas.

Art Unit: 1732

12) The rejection of Claim 27 over Jonas in view of Hodson and Hope is not a prima facie case of obviousness because Hodson and Hope do not make up for the deficiencies of Jonas.

13) The rejection of Claims 29-31 over Agrawal does not supply the deficiencies previously described in the rejection of Claim 18.

The Applicant's arguments are addressed as follows:

1and 3) The examiner relies on Jonas Fig. 3 to show an outwardly flexed bottom surface.

2, 4, 6, and 9) With respect to the preamble and content of Claim 15 and 18 about what the container is for (packaging a hot-filled food product), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. As it is capable of performing the use, it meets the claim. It is also noted that an actual step of packaging a hot-filled food product is absent.

5 and 7) The examiner relies on McHenry Fig. 1A to show an outwardly flexed bottom surface.

8 and 10) The examiner relies on Agrawal Fig. 3 to show an outwardly flexed bottom surface.

11, 12, and 13) As the primary references have been shown to cover the claimed matter of the independent Claims 15 and 18, the secondary references are not relied upon to cover the subject matter of Claims 15 and 18.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Butler whose telephone number is 571-272-8517. The examiner can normally be reached on Monday through Friday 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianne can be reached on 571-272-1196. The fax phone



Art Unit: 1732

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick Butler  
Assistant Examiner  
Art Unit 1732



**MICHAEL P. COLAIANNI**  
**SUPERVISORY PATENT EXAMINER**